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## THE TRANSFORMATION OF ARTISTIC PRINCIPLES FROM THE 16TH TO THE 18TH CENTURIES IN WATCH AND CLOTHING DESIGN: A COMPARATIVE ANALYSIS

KUROCHENKO Iryna<sup>1</sup>, KOKORINA Halyna<sup>1</sup>, REABENCHI Eugen<sup>2</sup>

<sup>1</sup> Kyiv National University of Technologies and Design, Kyiv, Ukraine

<sup>2</sup> "Ion CREANGĂ" State Pedagogical University, Chisinau, Moldova

*kurochenko.ir@gmail.com, galinaramasanova@gmail.com,*

*reabench.eugen@upsc.md*

*This paper presents the findings of a study into the design of European mechanical watches in the context of the genesis of dominant stylistic forms in accessories and clothing. Based on academic sources and visual examples, the key morphological features of watch cases have been identified. The principles of transforming historical artefacts and cultural symbols into costume design are described using artistic examples from the 16th–18th centuries. The analysis was conducted as part of preliminary research on which the development of the author's collection of contemporary clothing is based.*

**Key words:** *fashion, mechanical watch design, skeletonisation, transformation of form, designer clothing collection, conceptual design.*

### INTRODUCTION

The art of the 16th and 17th centuries in Europe is characterized by a transition from Renaissance harmony to Baroque complexity, which was clearly manifested in the design of watches. In the 18th century, during the Age of Enlightenment, the watch becomes an object that embodies the philosophical understanding of time, carries aesthetic functions and ceases to be simply an utilitarian tool. For a fashion designer, this period is a useful base for studying authentic samples, since it was then that the culture of wearing watches as part of a costume was born. The study of the structure, plasticity and decor of these objects prompts new approaches to the development of modern fashion.

### PURPOSE

The aim of the research is to identify the constructive and decorative features of European watches of the 16th-18th centuries and analyze the possibilities of their transformation in the process of designing modern clothing. The main task is to study watches as a holistic system, where the appearance and internal content form a visual interaction and become the basis for the development of author's sketches of costumes.

### RESULTS AND DISCUSSION

The analysis allows to outline five key stages in the development of watches: mechanical (15th-16th centuries), pendulum (17th century), spring (18th-19th centuries), electric (mid-20th century), and electronic (1970s to the present). Each



of these periods is marked by unique morphology, material characteristics, and symbolism that reflect the state of culture at the time and its design trends. Early mechanical watches were characterized by massive cases, complex gearing, and open decorative finishes that demonstrated the craftsmanship of the craftsmen.

The period from 1500 to 1800 was a time for European watchmaking to form the watch as an autonomous artistic object. The uniqueness of the design of this period lies in the transition from purely functional mechanics to complex multi-part structures. According to the concept of Marisa Bass, the watch of the early 17th century functions as an object of "small architecture", reflecting the intellectual status of the owner through a complex language of symbols [1]. The specificity of the design is based on the principle of morphological unity: the introduction of spiral springs made it possible to reduce the dimensions of the mechanism, which opened up space for jewelry experiments with the shape of the case. Researcher Silke Ackermann introduces the term "skeletonization" into the art historical analysis of jewelry works [2]. In watchmaking, skeletonization is the removal of "excess" metal from the plates and bridges of the mechanism in order to reveal its inner workings and allow the watch to be seen not as a static object, but as a dynamic system of relationships. Using the skeletonization method as a tool for morphological analysis opens up unique opportunities for the fashion designer, in particular, it allows to move on to the concept of visible construction. Specifically, this can be the use of transparent fabrics (organza, mesh), open seams or perforations that demonstrate the "inner world" of the product, for example, corset bones, lining or technological nodes that are usually hidden. In addition, such an approach gives a clue for multi-layered compositions. Each layer of clothing can imitate a certain "plate" of the mechanism. Comparative analysis allows you to transfer this hierarchy of levels from a watch to the structure of a suit, where the upper transparent layer only partially reveals the complex construction underneath.

Watch cases in the 17th and 18th centuries were cast from the finest gold or gilded silver. Engraving techniques were often used, creating complex relief scenes on the surface, from plant motifs to biblical and mythological subjects (Fig. 1).



**Fig. 1.** Mechanical watches of the 16th – 17th centuries: a – master B. Newsam, Great Britain, 1585; b – German firm "Metzger", 1568; c – almond-shaped pendant watch, 16th century; d – design and elements of the watch mechanism of the 17th century. [3, 4]

Sometimes, instead of a metal cover, a solid piece of polished quartz was used so that the owner could see the movement of the mechanism without opening



the case, which was considered the pinnacle of technology at the time. A clear rhythm is traced in the architectonics of watches, where the decor of the device forms a single compositional axis. The use of contrasting textures provided the object with dynamics and charm [3, 4]. The transformation of such approaches into fashion design can occur by creating complex carvings, for example, laser cutting or Richelieu embroidery, where the ornament of the baroque bridge of the watch becomes the cut of the back or sleeve, and the void in the design becomes a “window” on the human body.

The evolution of watches as a source of inspiration for modern design has a deep meaning and rich potential. The watch is not just a device for telling time, but also a cultural symbol, embodying the desire for order, precision, and harmony between technology and aesthetics (Fig. 2). Its form and function have evolved from massive mechanical structures to sophisticated electronic devices, reflecting changes in social trends, technological progress, and human aesthetic preferences.



**Fig. 2.** Moodboard, which presents the source of inspiration for creating an author's fashion collection. Author I. Kurochenko, KNUDT, 2025.

An artistic and stylistic analysis of jewelry and fashion of the 16th-18th centuries demonstrates the commonality of the stages of evolution of these art forms. Both phenomena are based on rhythm, repetition, symmetry and a harmonious balance between static and movement. Modern fashion designers, addressing the theme of time, actively use such structural motifs as a circle, line, spiral, pendulum movement and various mechanical details. In accordance with the needs of modern design, the evolution of watches is an excellent example of the interaction of technical and artistic thinking. They have a tangible synthesis of precise engineering and elegant form, which perfectly conveys the modern approach to design as a combination of functionality and aesthetics. This harmony



inspires today's designers to create not only household items, but also symbols of time. One of the key advantages of watches as a source of inspiration is their logical design. It demonstrates harmony between form and function, since each of its elements clearly fulfills its purpose, and the overall structure works in unison with the precision of the mechanism. This approach can be reinterpreted in contemporary design through the creation of objects where the exterior reveals the inner essence of the object, and decorativeness organically follows from its constructive basis. This resonates perfectly with the principles of functionalism and minimalism, which are relevant in contemporary design.

### CONCLUSIONS

As a result of the analysis of European watches of the 16th-18th centuries, it is argued that their design is based on a combination of technical pragmatics and artistic expression. It is determined that the main morphological feature of watches of this period is the principle of skeletonization. The use of a through-cut of parts and the orientation to micro-architectural forms transform the device into an intellectual and status symbol. Based on the principles of architectonics and rhythm of watches, it is possible to create clothing with a high level of conceptual complexity.

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**КУРОЧЕНКО І., КОКОРИНА Г., РЯБЕНЬКІ Є.**

### **ТРАНСФОРМАЦІЯ ХУДОЖНИХ ПРИНЦИПІВ XVI-XVIII ст. В ДИЗАЙНІ ГОДИННИКІВ ТА ОДЯГУ: ДОСВІД КОМПАРАТИВНОГО АНАЛІЗУ**

*У тезах представлено результати дослідження дизайну європейських механічних годинників в контексті генези домінуючих стилістичних форм в аксесуарах та вбранні. За даними наукових джерел та візуальних прикладів визначено ключові морфологічні ознаки годинникових корпусів. Описано принципи трансформації історичних артефактів та культурних символів у костюмному дизайні на прикладі художніх зразків XVI-XVIII століть. Аналіз проведено в рамках передпроектних досліджень, на яких базується розробка авторської колекції сучасного одягу.*

**Ключові слова:** мода, дизайн механічних годинників, скелетонізація, трансформація форми, авторська колекція одягу, концептуальний дизайн.